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INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PF030001	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 03/13164	International filing date (day/month/year) 24.11.2003	Priority date (day/month/year) 06.01.2003
International Patent Classification (IPC) or both national classification and IPC G11B27/10		
Applicant THOMSON LICENSING S.A. ET AL.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 4 sheets.

3. This report contains indications relating to the following items:
 - I Basis of the opinion
 - II Priority
 - III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV Lack of unity of invention
 - V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI Certain documents cited
 - VII Certain defects in the international application
 - VIII Certain observations on the international application

Date of submission of the demand 20.07.2004	Date of completion of this report 31.05.2005
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Mourik, J Telephone No. +31 70 340-4243



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/EP 03/13164

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-10 as originally filed

Claims, Numbers

1-18 as amended (together with any statement) under Art. 19 PCT

Drawings, Sheets

1/1 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

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5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-18
	No:	Claims	
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-18
Industrial applicability (IA)	Yes:	Claims	1-18
	No:	Claims	

2. Citations and explanations

see separate sheet

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

The following documents are referred to in this communication:

D1: DE-A-19608514

D2: XP02247539 (Pampalk et al)

1. The present application does not meet the requirements of Article 33(1) PCT, because the subject-matter of claims 1-18 does not involve an inventive step in the sense of Article 33(3) PCT.
 - 1.1. The concept of creating and accessing a menu for audio content consisting of audio tracks by means of associating reproducible audio extracts to a menu list is well known in the art, see D1. In D1, for each audio track an audio extract is associated to a menu list (col.2, lin.8-12 and 65-68).
 - 1.2. Claim 1 defines that audio extracts of "representative audio tracks" are associated to the menu list. This basically corresponds to a method that produces a menu list as in D1, with only one or a few audio extracts associated to it, rather than with one audio extract per audio track. This seems to reduce the accessibility of the audio tracks, rather than enhance it, compared to D1.

In any case, no problem with respect to the method of D1 can be recognized that would be solved by the features as defined in claim 1, contrary to Art. 33(3) PCT.

For the same reasons, mutatis mutandis, the subject-matter of claim 16 lacks an inventive step

- 1.3. Claim 1 further defines that this reduced menu list is obtained automatically. However, the concept of automatization as such is a general desire and is therefore not inventive.

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- 1.4. The idea of clustering audio tracks according to characteristic parameters of the audio tracks is already known from D2 (section 1. Introduction, paragraphs 4-6). D2 suggests to represent clusters by a particular piece (section 5. User Interface).
- 1.5. The remaining dependent claims add minor limiting features to the apparatus and method defined in the independent claims, all of which in so far as they are not explicitly disclosed in D1, D2, relate to routine measures normally to be expected of the skilled person. Thus these claims also lack an inventive step.

New Claims

1. A method for creating and accessing a menu for audio content stored in a storage means (S), the content consisting of audio tracks, and the menu containing representations of said audio tracks, **characterized in**
 - classifying (CL) the audio tracks into groups, or clusters (C1,...,C3) wherein said classification is performed according to characteristic parameters of said audio tracks;
 - selecting (R) automatically an audio track being a representative for the cluster, wherein said selection is performed according to the characteristic parameters of said audio track and of the other audio tracks of said cluster;
 - automatically generating (X) as said representation a reproducible audio extract from said representative audio track; and
 - associating said audio extract to a menu list (T).
2. Method according to claim 1, wherein said characteristic parameters used for classification of audio content comprise one or more audio descriptors, the audio descriptors being either physical features, or perceptual features, or psychological or social features of the audio content.
3. Method according to any of claims 1-2, wherein an audio track can be classified into more than one cluster (C1,...,C3).
4. Method according to any of claims 1-3, wherein the audio tracks within a cluster (C1,...,C3) have variable order, so

that the user listens to a randomly selected track when having selected a cluster (C1,...,C3), with said track belonging to said cluster.

- 5 5. Method according to any of claims 1-4, wherein a user can modify the result of automatic classification of audio tracks.
- 10 6. Method according to any of claims 1-5, wherein a user can modify the classification rules for automatic classification of audio tracks.
- 15 7. Method according to any of claims 1-6, wherein the actual audio data are clustered within said storage means (S) according to said menu.
- 20 8. Method according to any of claims 1-7, wherein the audio extract is a sample from the audio track, or an audio sequence being synthesized from the actual audio track.
- 25 9. Method according to any of claims 1-8, wherein audio extracts are created additionally for audio tracks not being representatives of clusters.
- 30 10. Method according to any of claims 1-9, wherein the length of audio extracts is not predetermined.
11. Method according to any of claims 1-10, wherein one of said clusters has no representative track.
12. Method according to any of claims 1-11, wherein said menu is hierarchical, such that a cluster may contain one or

more subclusters.

13. Method according to any of claims 1-12, wherein the classification rules are modified automatically if a defined precondition is detected, and a reclassification may be performed.
14. Method according to claim 13, wherein said precondition comprises that the difference between the number of tracks in a cluster and the number of tracks in another cluster reaches a maximum limit value.
15. Method according to claim 13, wherein said precondition comprises that all stored tracks were classified into one cluster, and the total number of tracks reaches a maximum limit value.
16. An apparatus for creating or accessing a menu for audio content stored on a storage means (S), the content consisting of audio tracks, and the menu containing representations of audio tracks, **characterized by**
- means for automatically classifying (CL) the audio tracks into groups, or clusters (C1,...,C3) wherein said classification is performed according to characteristic parameters of said audio tracks;
 - means for automatically selecting (R) an audio track being a representative for the cluster, wherein said selection is performed according to characteristic parameters of said audio track and of the other audio tracks of said cluster;
 - means for automatically generating (X) a reproducible audio extract from said representative audio track; and

- means for associating said audio extract to a menu list (T).

17. Apparatus according to claim 16, further characterized by

- 5 - means for selecting and reproducing a first audio representation from a first cluster;
- means for a first user input (M,SU,SD), the input controlling whether the cluster associated with the currently selected audio thumbnail is selected or not; and
- means for a second user input (M,SU,SD), the input controlling whether another cluster is selected or not.

18. Apparatus according to any of claims 16 or 17, further characterized in that an audio track of the selected cluster is read from said storage means (S) for playback.